

NIKITINA, M.F., kand.tekhn.nauk; TIKHONOV, A.A., inzh.

Effect of inoculating the AL8 alloy on changes in its mechanical properties in conditions of prolonged storage. Trudy MATI no.63:106-119 '65.
(MIRA 18:10)

TIKHONOV, A.A.

Approximate integration of equations in one case of motion of a
rigid body. Vest. LGU 20 no.19:132-139 '65.

(MIRA 18:10)

BUKHARINOV, G.N., dots.; I.VOVICH, A.Yu.; SABANEYEV, V.S.; TIKHONOV,
A.A.; TOVSTIK, P.Ye.; TSAR'KOVA, Z.I., red.

[Laboratory manual on the theory of oscillations] Laborator-
nyi praktikum po teorii kolebanii. Leningrad, Izd-vo Leningr.
univ., 1965. 75 p.
(MIRA 18:4)

1. Leningrad. Universitet. Matematiko-mekhanicheskiy fakul'tet.

TIKHONOV, A.A.

Stability of motion in the case of constant perturbations. Vest.
IGU 20 no.1:95-101 '65.
(MIRA 18:2)

STRAMBOVSKAYA, K.K.; TIKHONOV, A.A.

Study of brown coals of Itatskiy deposits. Izv. SO AN SSSR no.
11 Ser.khim.nauk no.3:114-117 '63. (MIRA 17:3)

1. Tomskiy politekhnicheskiy institut.

DERKACHEV, V.I.; FRIKHOLOKO, N.N.; TIKHONOV, A.A.

Double separation and reclamation of spent molding sand.

Lit. proizv. no.1:38-39 Ja '65.

(MIR 18:3)

TIKHONOV, A.A., inzhener.

Housing and industrial construction in Canada. Stroi.ored.neft.
prem. 2 no.6:31-32 Je '57. (MIRA 10:7)
(Canada--Construction industry)

PEVZNER, Ya.M., doktor tekhn.nauk; TIKHONOV, A.A., kand.tekhn.nauk

Investigating statistical characteristics of the microprofile
of basic types of highways. Avt.prom. 30 no.1:15-18 Ja '64.
(MIRA 17:3)

1. Nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy
institut.

TIKHOV, A. A.

TIKHOV, A. A.- "Investigation of Anti-Friction Properties of Copperlead Pseudo-alloys Obtained by Metallization." Min of Higher Education USSR, Odessa Polytechnic Inst, Odessa, 1955 (Dissertations for Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

TIKHONOV, A.A.; TADYKIN, M.T.

Remodeling trimming saws. Suggested by A.A.Tikhonov, M.T.
Takykin. Rats.i izobr.v stroi. no.9:77-79 '59.

(MIRA 13:1)

1. Direktor zavoda stroitel'nykh detalei tresta No.1
Ministerstva stroitel'stva BSSR, Minsk, ul.Vysokaya, d.15 (for
Tikhonov). 2. Glavnyy mekhanik zavoda stroitel'nykh detalei
tresta No.1 Ministerstva stroitel'stva BSSR, Minsk, ul.Vysokaya,
d.15 (for Tadykin).

(Saws)

TIKHONOV,A.A.; TADYKIN,M.P.

Modernized plane for cutting end pieces. Suggested by A.A. Tikhonov,
M.P.Tadykin. Rats. i izobr.predl.v stroi. no.13:112-115 '59.
MIRA 13:6)
1. Direktor zavoda "Stroydetal'" tresta No.21, Minsk, BSSR (for
Tikhonov). 2. Glavnnyy mehanik zavoda "Stroydetal'" tresta
No.21, Minsk, BSSR (for Tadykin).
(Woodworking machinery)

TIKHONOV, A. A.

TIKHONOV, A. A.: "Investigation of vertical oscillations of automobile wheels under road conditions." Min Automobile Industry USSR!. State Union Order of Labor Red Banner Sci Res Automobile And Automotive Inst (NAMI). Moscow, 1956. (Dissertation for the Degree of Candidate in Technical Sciences)

Knizhnaya letopis', No 39, 1956, Moscow.

TIKHONOV, A.A.

Investigating vertical vibrations of automobile wheels in road conditions. Avt. i trakt. prom. no.5:16-21 My '57. (MIRA 10:6)

1. Nauchno-issledovatel'skiy avtometornyy institut.
(Automobiles- Wheels--Vibration)

TIKHONOV, A.A.

113-58-3-4/16

AUTHORS: Briskin, M.I.; Gel'fgat, D.V., Candidate of Technical Sciences; Pevzner, Ya.M., Doctor of Technical Sciences; Tikhonov, A.A.

TITLE: Dynamic Stress in Truck Bodies (Dinamicheskiye nagruzki v kuzovakh gruzovykh avtomobiley)

PERIODICAL: Avtomobil'naya Promyshlennost', 1958, Nr 3, pp 12-16 (USSR)

ABSTRACT: At the present time, trucks are fitted with special apparatus which are often sensitive to shocks, etc. The transporting of fragile freight also makes protection against shocks necessary. Experiments were made, therefore, to measure accelerations in the trucks ZIL-151 and GAZ-63 acting in vertical and horizontal directions. For this purpose an optical accelerograph type NAMI was used (Figure 1). A beam of light was directed on a mirror which transduces the movement of the chassis and causes oscillations of the beam. These oscillations were registered by a film camera. The speed of the film was 18 mm/sec. The transducer of the apparatus is represented in Figure 3. The two truck types were loaded with 10 and 50% of their nominal capacity. The roads

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Dynamic Stress in Truck Chassis

113-58-3-4/16

on which the tests took place were of two types: cobble-stone and country dirt roads. The speed was 30 km/h. Measurements were made on sections of 200 m. The oscillations arising in the chassis are represented in Table 1. Higher oscillation frequencies, from 400 to 600 oscillations per minute, were caused by the hardness of the tires, etc. Still higher frequencies, from 1,400 to 2,200 oscillations per minute, were caused by the vibrations engine. Vertical accelerations of the chassis bottom of the truck ZIL-151 are represented in Table 2 (cobblestone roads), and Table 3 (country dirt roads). The tables show that in some cases the accelerations reached 50 m/sec^2 . More frequent were accelerations of $30-35 \text{ m/sec}^2$. In the back part of the chassis the accelerations were higher than in the front part. Table 4 represents the values for the truck GAZ-63, loaded with 10% of its nominal load and moving at 20 km/h. The measured values reached $45-48 \text{ m/sec}^2$ at times. Accelerations of $30-35 \text{ m/sec}^2$ were more frequent. Longitudinal accelerations in the truck ZIL-151 are shown in Table 5, and in the truck GAZ-63 in Table 6. These accelerations sometimes exceeded 50 m/sec^2 . Dynamic stresses were reduced by rubber shock absorbers. Their application to a

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Dynamic Stress in Truck Bodies

113-58-3-4/16

box of 100 kg decreased the accelerations to 25-30 m/sec².
The greatest dynamical stresses arised in loose loads. In
these cases the accelerations of the freight reached values
of 40 g (1 g = 9.8 m/sec²).
There are 5 figures, and 6 tables.

ASSOCIATION: NAMI

AVAILABLE: Library of Congress

Card 3/3 1. Cargo vehicles-Test methods

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APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755610019-6"

SEARCHED *SW* SERIALIZED INDEXED FILED
AUTHOR OR TITLE: *Avtomobil'naya promyshlennost'*

AUTHORS: Pevzner, Ya. M. (Doctor of technical sciences); Tikhonov, A. A. (Candidate of technical sciences)

TITLE: Investigation of the statistical properties of the microprofile of basic types of automobile roads

SOURCE: *Avtomobil'naya promyshlennost'*, no. 1, 1964, 15-18

TOPIC TAGS: transportation, traffic, correlation statistics

ABSTRACT: Laboratory experiments were conducted to measure the microprofile of common basic types of roads for automotive traffic. Various types of surfaces were tested, including cobblestones of satisfactory quality, cobblestones with chuckholes and mounds, asphalt, and concrete. The aim of the tests was to evaluate the variation of the statistical characteristics of microprofiles for use in calculating automobile vibrations. A stretch of road of constant general classification was treated as being represented by a stationary random function. Measurements were made on stretches of road 110 m long for cobblestones at 1.75 ± 1 cm for asphalt and cement concrete. At 10 cm (rough cobblestones), 17 cm (satisfactory cobblestones), or 50 cm (asphalt or concrete pavement) intervals, elevations

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ACCESSION NR: AP4049806

of the surface were taken with standard leveling equipment. All measurements were made in the morning hours from one instrument location. Where possible, the measuring rod was placed along the most travelled part of the road. Roads were selected from several Soviet oblasts. In all, 5800 meters of roadway were measured, and their characteristics are shown in a table. Normalized correlation functions were plotted and calculated for each case. An empirical correlation function $\rho(\ell) = A_1 e^{-\alpha_1 \ell} + A_2 e^{-\alpha_2 \ell} \cos \beta_1 \ell$, was found to describe satisfactorily the general case, where $\rho(\ell)$ is the normalized microprofile correlation function, $A_1 + A_2 = 1$, α_1 and α_2 are characteristic damping functions, and β_1 is a vibration coefficient. Periodicity considerations led to derivation of spectral density functions relating vibration to automobile speed. Each road type was described by a density function through analysis of its microprofile data. Orig. art. has: 4 tables, 5 figures, and 9 equations.

ASSOCIATION: NAMI

SUBMITTED: 00

SUB CODE: GO

Card 2/2

NO REF SOV: 001

ENCL: 00

OTHER: 000

L 27625-65 FSF(h)/EWT(1) IJP(c)
ACCESSION NR: AP5005781

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9
7B

AUTHOR: Tikhonov, A. A.

TITLE: On the stability of motion under constantly acting perturba-
tions

SOURCE: Leningrad. Universitet. Vestnik. Seriya matematiki,
mekhaniki i astronomii, no. 1, 1965, 95-101

TOPIC TAGS: motion stability, constantly acting perturbation,
Lyapunov function, perturbed motion

ABSTRACT: An analysis is made of the effect of constantly acting
perturbations upon the motion of a body described by a system of dif-
ferential equations of the form

$$\frac{dx_i}{dt} = \sum_{k=1}^n p_{ik}x_k + X_i(x_1, x_2, \dots, x_n) + f_i(t, x_1, \dots, x_n), \quad (1)$$

where p_{ik} are constant real coefficients, X_i are functions which can
be expanded in an absolutely convergent series in integer powers of
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ACCESSION NR: AP5005781

x in the neighborhood of the origin of a phase space, and f_g are functions representing constant perturbations which satisfy the inequality

$$|f_\varepsilon(t, x_1, x_2, \dots, x_n)| < \tilde{f}_\varepsilon(t),$$

where \tilde{f}_ε are certain continuous functions. Function $\Phi(t)$ expressed in terms of f_g and characterizing the perturbations is introduced and the final results obtained in the article are formulated as follows: when for system (1) a positive definite Lyapunov function V whose derivative

$$\frac{dV}{dt} \leq ae^{-kv} + \varphi(t) - a \quad 0 \leq V \leq h, \quad (2)$$

where a and k are coefficients satisfying certain conditions, can be constructed, and for constantly acting perturbations characterized by the function $\varphi(t)$ there exists a positive constant $h_0 < h$ such that the function $H(t, h_0)$ which is defined by the equation

$$\frac{dH}{dt} = ae^{-kh} + \varphi(t) - a \quad (3)$$

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ASSOCIATION: none

[TK]

behavior of solutions of (1) is obtained. Or if, $\theta_0 = 33$ for $c = 0$, $\theta_0 = 0$ for $c = 3$. For which more detailed information concerning the behavior of solutions of (1) is analyzed for two particular cases: (i) $c = 0$ and (ii) $c = \infty$. Inequality (3) is satisfied for two bases of (5). The estimates for solutions of (1) are derived on the basis of (4). The estimates for perturbations characterized by the function and upon conditionally accurate perturbations characterized by the constant θ_0 based upon the initial conditions unique constraints from

(5)

$$V \leq H(c, \theta_0)$$

for all $c > 0$, By interchanging equation (3), inequality (4) is ob-

(4)

$$H(c, \theta_0) > b$$

satisfy the inequality

Q

ACCESSION NR.: AF5005781
L27625-65

TIKHONOV, A. F.

Tikhonov, A. F. "The work of the scientific-technical student circles of the Belorussian Wood-Technology Institute imeni S. M. Kirov," Sbornik nauch. trudov (Belorus. lesotekhn. in-t im. Kirova), Issue 7, 1948, p. 157-59.

So: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949).

BUDYKA, S.Kh., kandidat tekhnicheskikh nauk, dotsent; TIKHOVOV, A.P.,
kandidat tekhnicheskikh nauk, dotsent; YURKEVICH, I.D., professor,
redaktor; ZAKHAROV, V.K., professor, doktor sel'skokhozyaystvennykh
nauk, redaktor; ALEKSANDROVICH, Kh., tekhnicheskiy redaktor

[Manual for workers in the logging industry] Spravochnik rabotnika
lesosagotovitel'noi promyshlennosti. Sost. S.Kh.Budyka i A.P.Tikhonov.
Minsk, 1955. 774 p.
(MLRA 10:1)

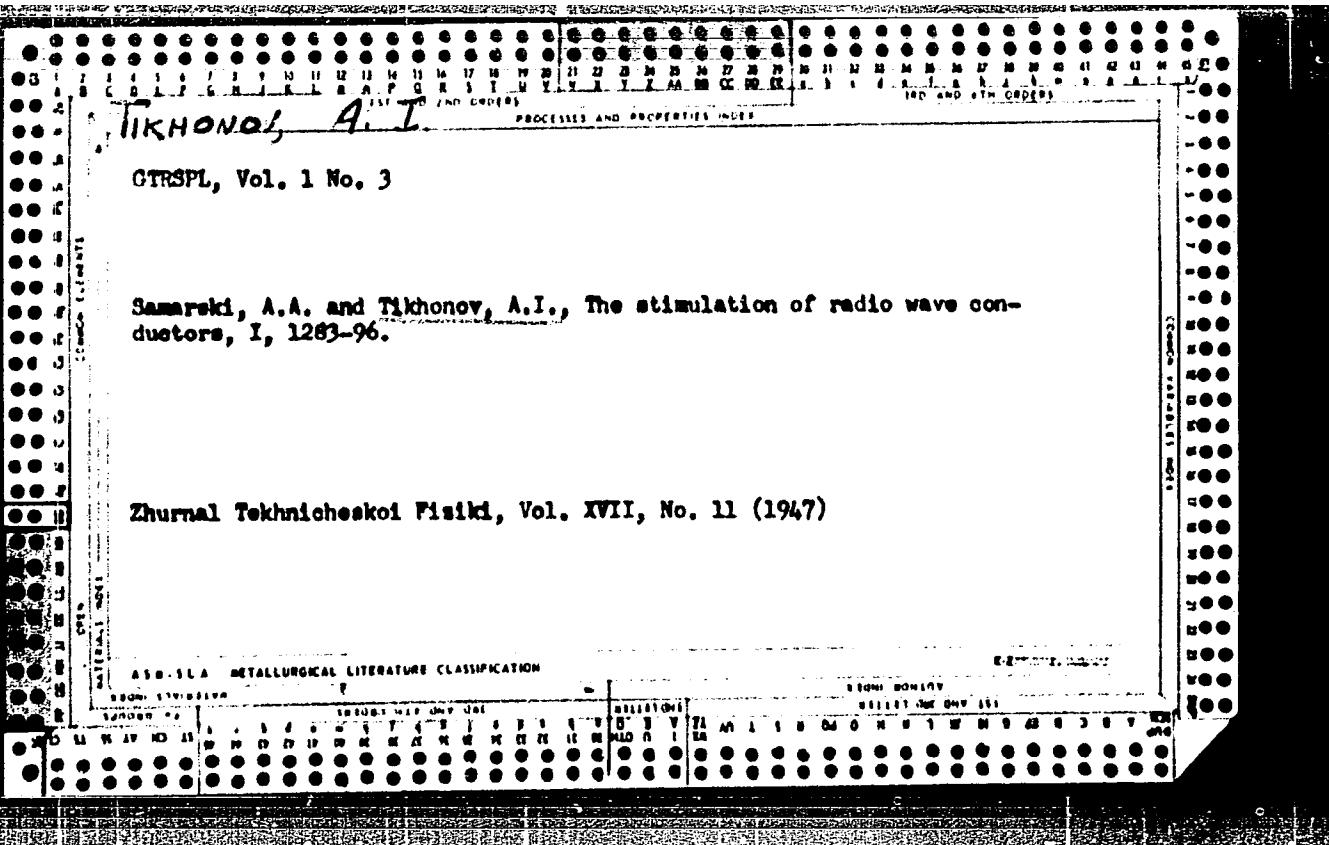
1. Akademiya nauk BSSR, Minsk. Institut lesa. 2. Chlen-korrespondent
AN BSSR (for Yurkevich)
(Lumbering)

TIKHONOV, A.F., kandidat tekhnicheskikh nauk; APANOVICH, A.M.; MARTYNOVSKIY,
Ye.I.; KOMAROV, Yu.M.; TRUKHANOVA, A., tekhn'cheskiy redaktor

[Progressive lumbering methods] Peredovye metody truda na leso-
zagotovkakh. Pod obshchei red. A.F.Tikhonova. Minsk, Gos. izd-vo
BSSR, 1956. 111 p.
(Lumbering) (MLRA 9:11)

~~TIKHONOV, A.F.; MARTYNOVSKIY, Ye.I.; VAYNRUB, Ye.G; TIKHONOV, A.F.~~
~~dovzhenko, kandidat tekhnicheskikh nauk, redaktor; CHERNYAK, I.,~~
~~redaktor; TRUKHANOVA, A., tekhnicheskiy redaktor~~

[Experience in using new lumbering equipment in the forests
of White Russia] Opyt ekspluatatsii novogo lesozagotovitel'nogo
oborudovaniia v lesakh BSSR. Pod red. A.F. Tikhonova. Minsk,
Gos. izd-vo BSSR, 1957. 133 p. (MLRA 10:4)
(White Russia--Lumbering--Machinery)



BUDYKA, Sergey Khristoforovich; TIKHONOV, Adam Forich; Prinimali
uchastiye: KOVALEV, N.F.; MAKAREVICH, V.S.; TIMOFEYEV, L.,
red.izd-va; VOLOKHANOVICH, I., tekhn. red.

[Manual on the timber industry] Lesopromyshlennyi spravochnik.
Minsk, Izd-vo Akad. nauk BSSR, 1962. 711 p. (MIRA 15:11)
(Lumbering)

TIKHONOV, Aleksey Ivanovich; CHEREPOVICH, Sergey Yefimovich;
GRITSKEVICH, A.G., kand. tekhn. nauk, red.

[White Russia, a republic with large-scale chemical
industries] Belorussiia - respublika bol'shoi khimii.
Minsk, Belarus', 1964. 57 p. (MIRA 18:7)

TIKHONOV, A. I.

Category: USSR / Physical Chemistry
Thermodynamics. Thermochemistry. Equilibrium. Physico-
chemical analysis. Phase transitions.

B-8

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29889

Author : Smirnov V. I., Tikhonov A. I.

Inst : Academy of Sciences USSR

Title : Equilibrium of Interaction of the Chlorides of Cobalt, Nickel and
Copper with Oxygen

Orig Pub: Izv. AN SSSR, Otd. tekhn. n., 1956, No 9, 48-54

Abstract: Description of the layout of a circulation unit and of the method
investigating the equilibrium in the chloride - oxygen system.
Approach to the state of equilibrium is effected from two sides.
Calculation of K is carried out on the basis of determination of
change in gas pressure Δp , and at small Δp , also from the results
of analysis of the gaseous phase for the chlorine content. Decompo-
sition of $CoCl_2$ and $NiCl_2$ by the oxygen takes place in a single stage
according to the reactions: $3CoCl_2 - 2O_2 \rightarrow Co_3O_4 - 3Cl_2 (l)$ and

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Category: USSR / Physical Chemistry

Thermodynamics, Thermochemistry. Equilibrium. Physico-chemical analysis. Phase transitions.

B-8

Abs Jour: Referat Zhur-Khimija, No 9, 1957, 29889

$2\text{NiCl}_2 + \text{O}_2 \rightleftharpoons 2\text{NiO} + 2\text{Cl}_2$ (2), and that of CuCl_2 occurs in two stages: $4\text{CuCl}_2 + \text{O}_2 \rightleftharpoons 2\text{CuO}\text{CuCl}_2 + 2\text{Cl}_2$ (3) and $2\text{CuO}\text{CuCl}_2 + \text{O}_2 \rightleftharpoons 4\text{CuO} + 2\text{Cl}_2$ (4); the equilibrium constants K_e of reactions (1) - (4) are given by the equations: 1) $\lg K_e = -13800/T + 15.45$ ($400 - 650^\circ$); 2) $\lg K_e = -8750/T + 8.32$ ($400 - 650^\circ$); 3) $\lg K_e = -5700/T + 4.38$ ($300 - 450^\circ$); 4) $\lg K_e = -9740/T + 9.525$ ($350 - 450^\circ$). The K_e measured by the authors are in some instances greater by one order than those previously determined (Jellinek K., Rudot A., Z. anorgan. und allgem. Chem., 1926, 155).

Card : 2/2

-17-

TIKHONOV, A.I.; SMIRNOV, V.I.; SRYVALIN, I.T.

Decomposition kinetics of cobalt, nickel, and copper chlorides by
oxygen. Trudy Ural. politekh.inst. no.58:167-176 '57.
(Cobalt chloride) (Nickel chloride) (MIRA 11:4)
(Copper chloride)

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SMIRNOV, Vasiliy Ivanovich; TIKHONOV, Anatoliy Ivanovich; AGLITSKIY, V.A.,
red.; DUCHKO, Yu.V., red. izd-va; ZMP, Ye.M., tekhn. red.

[Roasting of copper ores and concentrates; theory and practice]
Obzhig mednykh rud i kontsentratov; teoriia i praktika. Sverdlovsk,
Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii,
Sverdlovskoe otd-nie, 1958. 284 p.
(MIRA 11:9)
(Copper ores)

75-13-2-26/27

AUTHOR: Tikhonov, A.

TITLE: Review and Bibliography (Kritika i bibliografiya)

PERIODICAL: Zhurnal Analiticheskoy Khimii, 1958, Vol. 13, Nr 2,
pp. 264-264 (USSR)

ABSTRACT: This article is a review of the scientific manual:
"Fundamental Principles of Qualitative Chemical Analysis"
("Osnovy kachestvennogo khimicheskogo analiza") by
N.I. Komar'. Edition by the Khar'kov State University
imeni A.M. Gor'kiy (1955). The work is an introduction
to the course for qualitative chemical analysis.

1. Chemistry--Bibliography

Card 1/1

USPENSKIY, N.F.; KUSAKIN, P.S.; DIYEV, N.P. [deceased]; PERESTORONIN,
A.A.; TIKHONOV, A.I.; PRISHLETSOV, D.V.; YERKIN, L.I.

Shaft furnace melting of an oxidized nickel ore sinter with
use of highly sulfurous coke. Trudy Inst.met.UFAN SSSR
no.5:123-135 '60.
(Nickel--Metallurgy) (Sulfur)
(MIRA 13:8)

TIKHONOV, A.I.; SYRVALIN, I.T.

Thermodynamics of the basic reactions in chloridizing roasting.
Trudy Ural.politekh. inst. no.98:41 '60. (MIRA 14:2)
(Nonferrous metals—Metallurgy)

YABLONSKIY, Yu.A.; TIKHONOV, A.I.

Reducing copper losses with slags during the reduction smelting
of copper matte. Trudy Ural.politekh. inst. no.98:46-58 '60.
(MIRA 14:3)
(Copper—Metallurgy) (Slag—Analysis)

TIKHONOV, A.I.; SMIRNOV, V.A.

Data on the rate of antimony sulfide oxidation in a fluidized bed. Izv. vys. ucheb. zav., nauch.-tekhn. 8 no.3; 23-76 '65.
(MLFA 18:9)

1. Ural'skiy politekhnicheskiy institut, kafedra metallicheskikh
tyazhelykh tsvetnykh metallov.

TIKHONOV, A.I.; CHUCHMAREV, S.K.; SMIRNOV, V.I., akademik

Kinetic regularities in the oxidation of lower nickel sulfide in a
fluidized bed. Dokl. AN SSSR 163 no.3;686-689 J1 '65. (MIRA 18:7)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova. 2. AN KazSSR
(for Smirnov).

DROBCHENKO, A.T.; SMIROV, V.I.; MAZANIK, V.N.; TIKHONOV, A.I.; RANSKIY,
B.N.; KHARAIM, V.A.

Retreatment of slags from the smelting of secondary copper con-
taining raw materials. TSvet. met. 37 no.12:23-25 D '64
(MIRA 18:2)

TIKHONOV, A.I.; YAROSLAVTSEV, A.S.; SMIRNOV, V.I., akademik

Kinetics of cadmium sulfide oxidation in a "bubbling" bath.
(MIRA 17:12)
Dokl. AN SSSR 159 no.1:12-196 N '64.

1. Ural'skiy politekhnicheskiy institut im. S.M. Kirova.
2. AN KazSSR (for Smirnov).

SMIRNOV, Vasiliy Ivanovich; TSEYDLER, Aleksandr Al'bertovich;
KHUDYAKOV, Ivan Fedorovich; TIKHONOV, Anatoliy Ivanovich.

[Metallurgy of copper, nickel and cobalt; alternative course]
Metallurgiia medi, nikelia i kobal'ta; alternativnyi kurs.
[By] V.I.Smirnov i dr. Moskva, Izd-vo Metallurgiia. Pt.1.
[Metallurgy of copper] Metallurgiia medi. 1964. 462 p.
(MIRA 17:8)

DROBCHENKO, A.T.; MAZANIK, V.N.; RANSKIY, B.N.; KHARAIM, V.A.; SMIRNOV, V.I.;
TIKHONOV, A.I.

Regularities of the reduction process for liquid slags from copper
smelting. TSvet. met. 36 no.12:15-18 v '63. (MIRA 17:2)

TIKHONOV, A.I.; KLYUYEVA, A.V.

Leaching nickel-cobalt ores with sulfuric acid solutions. Sbor. nauch.
trud. Ural. politekh. inst. no.134:32-39 '63. (MIRA 17:1)

KUDYAKOV, I.F.; TIKHONOV, A.I.

Treatment of a new raw ore at the Karabash Mining and Metallurgical Combine. Sbor. nauch. trud. Ural. politekh. inst. no.134:14-22 '63.
(MIRA 17:1)

SMIRNOV, Vasiliy Ivanovich; KHUDYAKOV, Ivan Fedorovich; TIKHONOV,
Anatoliy Ivanovich; KIL'DIEKOV, R.G., retsenzent; MISHIN,
V.D., red.; KRYZHOOVA, M.L., red. izd-va; MATLYUK, R.M.,
tekhn. red.

[Obtaining cobalt from converter slags] Izvlecheniye kobal'ta
iz konverternykh shlakov. Sverdlovsk, Metallurgizdat, 1963.
150 p. (MIRA 16:5)

(Cobalt) (Slag)

SMIRNOV, V.I.; YABLONSKIY, Yu.A.; TIKHONOV, A.I.; LEBED', B.V.

Flow-sheets for the complete retreatment of slags from plants of
nonferrous metallurgy. TSvet. met. 35 no.9:50-56 S '62.
(MIRA 16:1)
(Nonferrous metal industries--By-products)
(Slag)

RODOV, A.B.; TIKHONOV, A.I.; KIBRIK, P.S., red.; MAYZEL', Yu.A.,
red.; KOLOTUSHKIN, V.I., red.; LOKUNOV, N.I., tekhn.red.

[Heat control and measurement instruments and automatic
regulators of the boiler feeders of B-4000 railroad car
mounted power plants and their maintenance] Teplovye
kontrol'no-izmeritel'nye pribory i avtomaticheskie re-
gulyatory pitaniiia kotlov energopoezdov B-4000 i ikh ob-
sluzhivanie. Moskva, Gosenergoizdat, 1962. 83 p.

(MIRA 15:10)

(Electric power plants)

DERKACHEV, V.I.; TIKHONOV, A.I.

Vertically-closed conveyor for casting rollers in chill molds.
Lit. proizv. no. 6:39 Je '62. (MIRA 15:6)
(Foundries—Equipment and supplies)

SMIRNOV, V.I.; LEBED', B.V.; TIKHONOV, A.I.; YABLONSKIY, Yu.A.

Complex processing of waste slags from the copper industry.
TSvet.met. 34 no.10:46-50 O '61. (MIRA 14:10)
(Copper industry--By-products) (Slag)

KUZNETSOV, A.P.; TIKHONOV, A.I.

Screens for protection against shavings. Stan. i instr.
26 no.5:13-14 My '55. (MLRA 8:8)
(Machinery--Safety appliances)

TIKHONOV, A.I.

Ploskaia zadacha o dvizhenii kryla pod poverkhnost'iu tiazhelci zhickosti knoechnoi glubiny. (Akademija Nauk SSSR. Izvestiia. Otdelenie tekhnicheskikh nauk, 1940, no. 4, p.57-78, diagrs.)

Title tr.: Plane problem of the motion of the wing under the surface of a heavy fluid of finite depths.

AS262. A6244 1940

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress
1955

MATYUSHKINA, N.A., kand.biologicheskikh nauk; TIKHONOV, A.M., kand.
pedagogicheskikh nauk

Features of work in light protective clothing (without
artificial microclimate) on dry land and under water.
Voen.-med. zhur. no.11:48-52 N '61. (MIRA 15:6)
(CLOTHING, PROTECTIVE)
(WORK) (MEDICINE, MILITARY)

TIKHONOV, A.N.

Black-and-white television sets. Standartizatsiia 27 no.1:53-58
Ja '63. (MIRA 17:4)

TIKHONOV, A. N. (Moskva); SAMARSKIY, A. A. (Moskva)

Homogeneous difference systems on nonuniform nets. Zhur. vych.
mat. i mat. fiz. 2 no.5:812-832 S-0 '62.
(MIRA 16:1)

(Difference equations)

S/020/63/149/003/005/028
B112/B180

AUTHORS: Tikhonov, A. N., Corresponding Member AS USSR, Samarskiy, A.A.

TITLE: Stability of difference schemes

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 149, no. 3, 1963, 529 - 531

TEXT: An example is given which shows that the hypothesis that a difference scheme is stable in a class of variable coefficients if it is stable in a class of constant coefficients is not valid when the class of variable coefficients contains only piece-wise continuous and piece-wise differentiable functions.

SUBMITTED: December 29, 1962

Card 1/1

L 25540-66 EWT(1)/EWA(h) GW

ACC NR: AP6007873

(N)

SOURCE CODE: UR/0387/66/000/002/0034/0041

AUTHOR: Tikhonov, A. N.; Berdichevskiy, M. N.

36

B

ORG: All-Union Scientific Research Institute of Geophysics (Vsesoyuznyy nauchno-issledovatel'skiy institut geofiziki)

TITLE: Use of magnetotelluric methods in studying the geologic structure of sedimentary basins

SOURCE: AN SSSR. Izvestiya. Fizika Zemli, no. 2, 1966, 34-41

TOPIC TAGS: telluric current, ^{physical}geology, seismic prospecting

ABSTRACT: The paper is a general review of magnetotelluric methods (i. e. methods of geophysical prospecting based on measurements of variation in the natural electromagnetic field of the earth) used in the Soviet Union for studying the geologic structure of sedimentary basins. The basic characteristics of three main categories are studied: 1. magnetotelluric sounding, 2. magnetotelluric profiling, and 3. the telluric current method. In all these methods, the primary part of the magnetotelluric field (i. e. radiation from the ionosphere) is considered as a polyharmonic set of plane electromagnetic waves incident on the flat surface of the earth. Analytical expressions based on this model are given for calculating the electrical and magnetic field intensities in the three main classes of magnetotelluric methods. These methods

UDC: 550.837.6

Card 1/2

L 25540-60

ACC NR: AP6007873

have been used for accumulating a great deal of experimental data on variations of the P_c and P_i types which confirm the physical validity of the plane-wave approximation in this region of the spectrum. Orig. art. has: 9 figures, 2 tables, 2 formulas.

SUB CODE: 08/ SUBM DATE: 20Jan65/ ORIG REF: 011/ OTH REF: 001

Card 2/2 UVR

ACC NR.: AP/005327

SOURCE CODE: UR/0131/66/003/012/3459/3462

AUTHOR: Iveranova, V. I.; Tikhonov, A. N.; Zaikin, P. N.; Zvyagina, A. P.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Determination of the phonon spectrum of crystals from the specific heat

SOURCE: Fizika tverdogo tela, v. 8, no. 12, 1966, 3459-3462

TOPIC TAGS: phonon spectrum, distribution function, specific heat, crystal property, thermodynamic function, aluminum

ABSTRACT: By using an approximate relation between the frequency distribution function and the specific heat, the authors demonstrate that in the harmonic approximation it is possible to calculate the phonon spectrum of crystals from the specific heat and from other thermodynamic functions. The approximate frequency distribution function is obtained directly from the experimental data on the specific heat. The determination of the approximate distribution function is facilitated by the fact that, in the approximation considered, the phonon spectrum is a continuous and piecewise smooth function with a derivative having a finite number of discontinuities. The resultant approximation is a smooth function which carries a minimum of characteristic information (line structure) and satisfies the equation with a specified accuracy. By way of an example, the frequency distribution function of aluminum, obtained from the integral equation using experimental information on the specific heat of aluminum,

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ACC NR: AP7005327

is presented. It is noted in the conclusion that the method can be used without modification to determine the energy spectrum of any Bose system from its thermodynamic functions. Orig. art. has: 2 figures and 9 formulas.

SUB CODE: 20/ SUBM DATE: 03Jan66/ ORIG REF: 005/ OTH REF: 003

Card 2/2

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755610019-6

TIKHANOV, A. N.

1925-1959

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755610019-6"

Über einen Metrisationssatz von P. Urysohn. Math. Ann., 95 (1925), 139-142.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A. G.,
Markushevich, A. I.,
Rashevskiy, P. K.
Moscow-Leningrad, 1948

Tikhonov, A. N.

"Über die topologische Erweiterung von Räumen. Math. Ann., 102 (1929), 544-561.

SO: Mathematics in the USSR, 1917-1947

edited by Kurosh, A. G.,

Markushevich, A. I.,

Rashevskiy, P. K.

Koscow-Leningrad, 1948

V

Линник, А. Н.

Ob uravnenii teploprovodnosti dlya neskol'kikh peremennykh. M., Byull. un-ta (a), 1:9
(1933).

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A. G.,
Markushevich, A. I.,
Rashevskiy, P. K.
Moscow-Leningrad, 1948

Théorèmes d'unicité pour l'équation de la chaleur. Matem. sb., 42 (1935), 199-216.

SO: Mathematics in the USSR, 1917-1947

edited by Kurosh, A. G.,

Markushevich, A. I.,

Rashevskiy, P. K..

Moscow-Leningrad, 1948

TIKHONOV, A. N.

Ein fixpunktsatz. Math. ann. 111 (1935), 767-776.

SO: Mathematics in the USSR, 1917-1947
edited by Jurosh, A. G.,
Markushevich, A. I.,
Rashevskiy, P. K.
Moscow-Leningrad, 1948

Ob universal'nom topologicheskem prostranstve. Dan. 3 (1936), 49-52.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A. G.,
Markushevich, A. I.,
Rashevskiy, P. K.
Moscow-Leningrad, 1948

Tikhonov, A. N.

Tikhonov, A. N. "On the Influence of Radioactive Disintegration on the Temperature of the Earth's Crust." Izvestiia Akad. Nauk S.S.R. - O.N.E.", Leningrad-Moscow, Seriya Geograf. i Geofiz., No. 3, 1937, pp. 431-459.

TIKHONOV, A.N.

O funktsional'nykh uravnen'yakh tipa volterra i ikh primeneniyakh k nekotorym zadacham
matematicheskoy fiziki. M., Byull. UN-TA (A), 1:8 (1938)., 1-25.

SO: Mathematics in the USSR, 1917-1947
edited by Jurosh, A. G.,
Markushevich, A. I.,
Rashevskiy, P. K.
Moscow-Leningrad, 1948

TIKHONOV, A. N.

Inst. for Theoretical Geophysics, Acad. of Sci. USSR, Polucheno, (-1942-)

"The Effect of Inhomogeneity of Earth Crust on a Field of Telluric Currents,"

Iz. Ak. Nauk SSSR, Ser. Geograf. i. Geofiz., Nos. 1 - 6, 1942.

TIKHONOV, A. N.

Inst. for Theoretical Geophysics, Acad. Sci., Polucheno, (-1942-)

"The Influence of an Intermediate Layer in Vertical Electric Soundation,"

Iz. Ak. Nauk SSSR, Ser. Geograf. i Geofiz., Nos. 1 - 6, 1942.

TIKHONOV, A. N.

"On the Stability of Inverse Problems," Dok. AN, 39, No. 5, 1943. Corr. Mor., AS
c. 1943-.
M-116-79

Линник, А. ...

Ob ustoichivosti obratnykh zadach. Dan, 39 (194³), 195-198.

SC: Mathematics in the USSR, 1917-1947

edited by Kurosh, A. G.,

Markushevich, A. I.,

Rashevskiy, P. K.

Moscow-Leningrad, 1948

TIKHONOV, A. N.

Institute of Theoretical Physics, Acad. of Sci., (-1945-)

Seismological Institute, (-1945-)

"On the Averaging of Gravimetric Fields,"

Iz. Ak. Nauk SSSR, Ser. Geograf. i. Geofiz., No. 3, 1945

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755610019-6

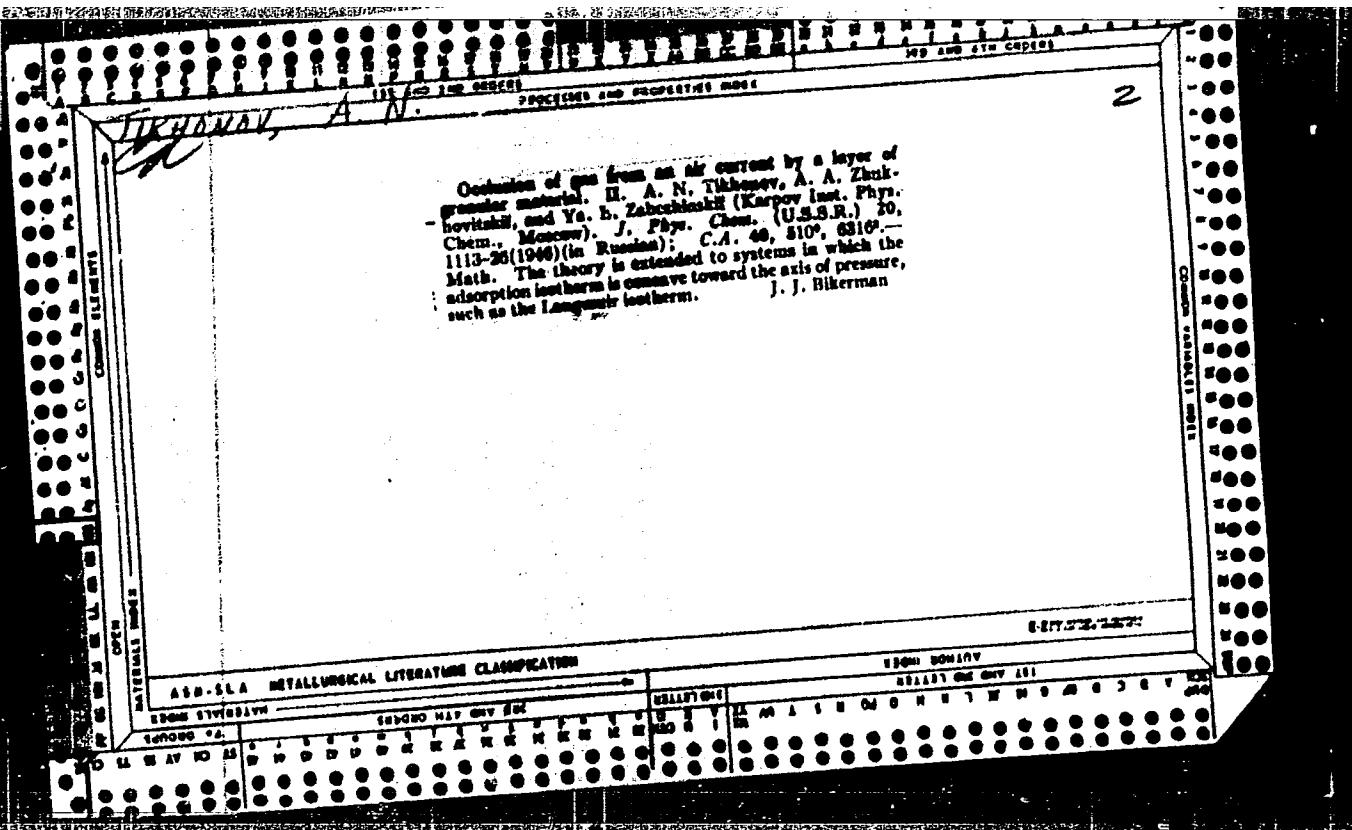
APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755610019-6"

TIKHONOV, A. N.

"The Settling of the Electric Current in a Homogeneous Conductive Half-Space,"
Vest. AS USSR, Vol. 10, 1946

Inst. Theoretical Geophysics, AS USSR



TIKHONOV, A. N.

PA 26T29

USSR/Geophysics
Geophysical Prospecting

Sep/Oct 1947

"Development of Electrical Geophysical Exploration
for Thirty Years," A. N. Tikhonov, A. I.
Zabrovskiy, 4 pp

"Iz Ak Nauk SSSR, Ser Geog i Geofiz" Vol XI, No 5

Up to 1920 there was one publication in Russian
which dealt with this subject. After 1920 more
interest was evidenced in this field and great
strides were made when the Government formed the
All-Union Office for Geophysical Work and the State
Council for Geophysical Trusts. Brief description
of the organized program which was begun in 1928

26T29

USSR/Geophysics (Contd)

Sep/Oct 1947

to create a large class of skilled specialists
in the field of electrical geophysical
explorations.

26T29

TIKHONOV, A. N.

PA 11T24

USSR/Aluminum Ingots
Copper ingots

Feb 1947

"The Theory of a Continuous Ingot," A. N. Tikhonov,
E. G. Zhvidkovskiy, 16 pp

"Zhur Tekh Fiz" Vol XVII, No 2

Statement of the problem in the form of a partial differential equation relating u (temperature) to t (time) and x (distance). Approximate solution. Practical statement of the problem in the case of aluminum and copper bars, plates and cylinders. Calculation of crystallization.

11T24

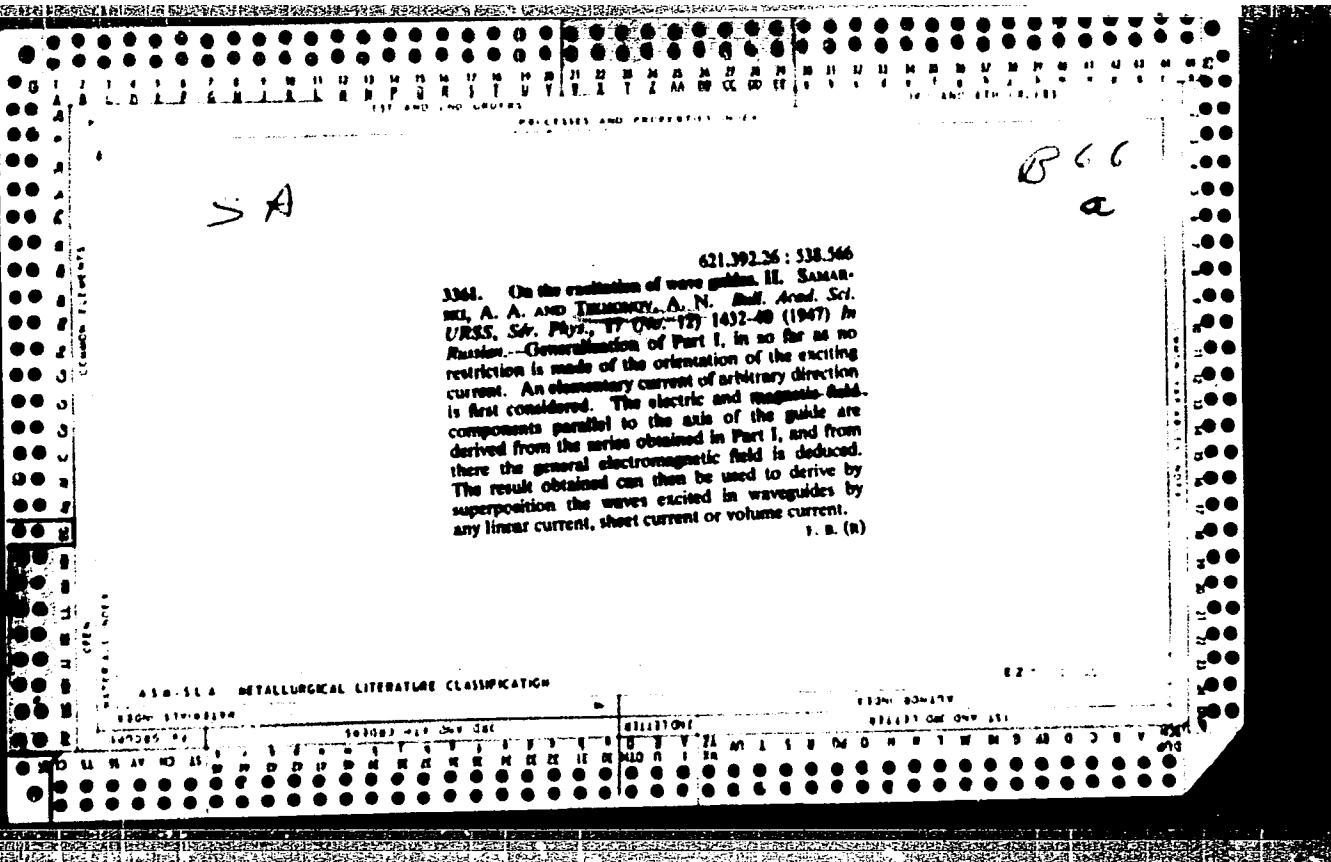
TIKHONOV, A. N.

SA

AS3
V

538.566 : 621.392.26
4094. On the excitation of wave guides. I. SAMARSKIY, A. A. AND TIKHONOV, A. N., Bull. Acad. Sci. URSS, Ser. Phys. 17 (No. 11) 1283-96 (1947) In Russian.—The authors examine the excitation of cylindrical waveguides of arbitrary cross-section by a linear current parallel to the axis. The Hertz vector of each current element is obtained by means of an infinite series involving the eigenfunctions of the guide cross-section. The total Hertz vector is then derived using the principle of superposition. The analysis is carried out on a rigorous mathematical basis and an extensive use is made of the properties of Green's functions.

F. B.



TIKHONOV, A. N.

"The Stimulation of Radio Wave Conductors," Zhur. Tekh. Fiz., 18, 11, 1947.

TIKHONOV, A.N.

FA 26T60

USSR/Physics
Absorption
Mathematics - Applied

Jan 1947

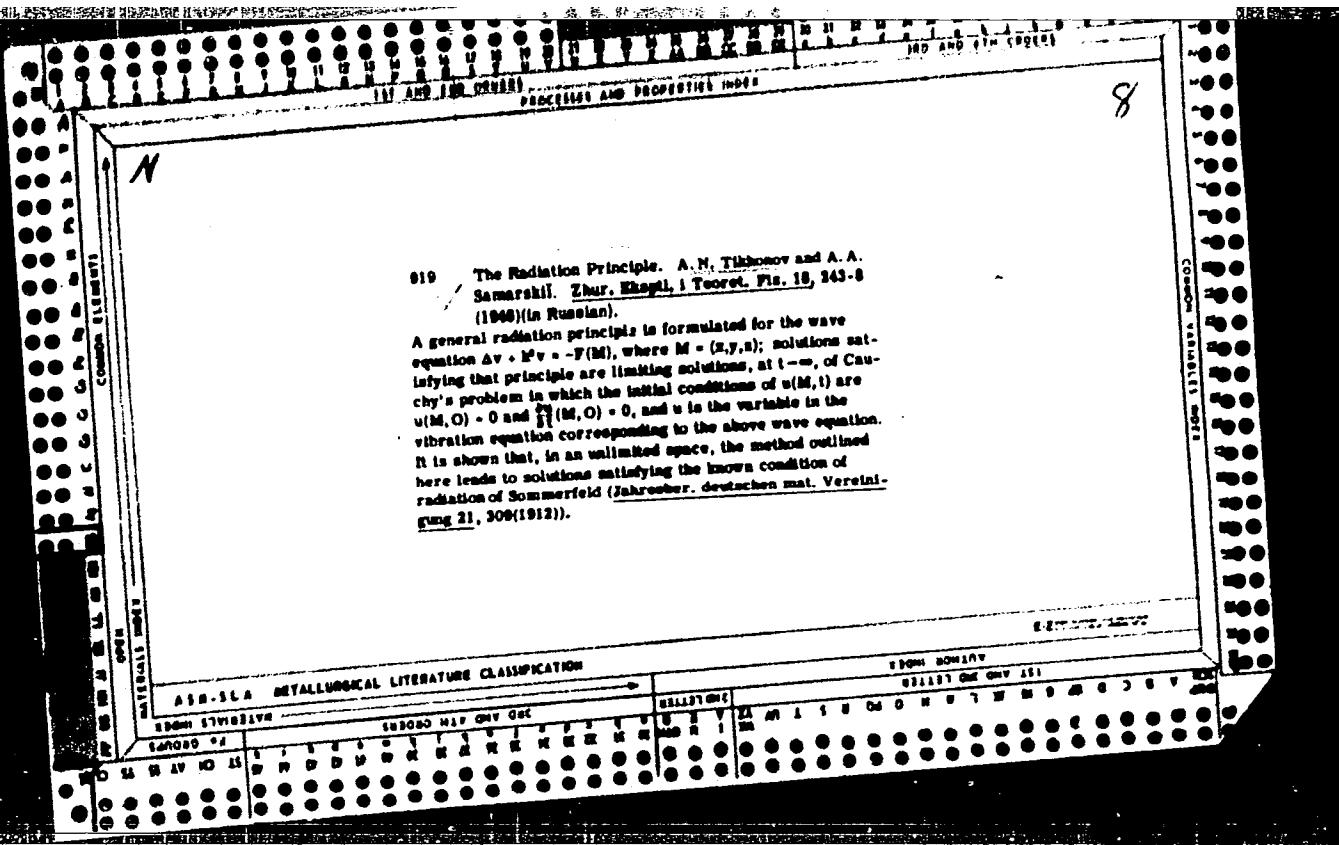
"Absorption of Gas from an Air Current by Granular Material, Part II," A. Tikhonov, A. Schuchowitzky, J. Zabzhinsky, Karpov Institute of Physical Chemistry, Moscow, 16 pp

"Acta Physicochimica URSS" Vol XXII, No 1

A solution is given to the simple linear differential equations describing gas absorption. Experimental data is compared with theoretical results, in tabular and graphical form.

BS

26T60



14.8.

On Representing the Field in a Waveguide as a Sum
of the TE and TM Fields. A. A. Samarski & N. N.
Tikhonov. (Zh Tekh Fiz., July 1948, Vol. 18, No. 7
196-039-970. In Russian.) It has been stated by various
authors without proof that any field in a waveguide can
be represented as a sum of the transverse electric field
TE and the transverse magnetic field TM. A rigorous
mathematical proof is given that any e.m. field in a
waveguide can be represented by two Hertzian vectors
each having only one component differing from zero.
The problem of determining the e.m. field in a wave-
guide is then reduced to the problem of finding two
scalar functions Z_x and Z_y (transverse components of
the electric and magnetic Hertzian vectors)

201

10/11/7

TIKHONOV, A. N.

PA 10/49T38

USSR/Electronics
Wave Guides

Jul 48

"Excitation of Wave Guides. III," A. A. Samarskiy,
A. N. Tikhonov, Sci Res Inst of Phys, Moscow State
U, 15 pp

"Zhur Tekh Fiz" Vol X'III, No 7

In two previous papers authors examined problem of
excitation of a cylindrical wave guide of arbitrary
section by means of arbitrary currents within the
wave guide. Here authors derive formulas for active
part of emission resistance $R^{(a)}$ of arbitrary
current. Submitted 24 Jan 48.

10/49T38

"APPROVED FOR RELEASE: 07/16/2001

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TIKHONOV A

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755610019-6"

FA 51/49T103

USSR/Radio
Wave Guides

At temps

"Radiation Resistance of Line Currents," A. A.
Samarskiy, A. N. Tikhonov, Moscow State U-lmeni
M. V. Lomonosov, 11 pp

"Zaur Tekh Fiz" Vol XIX, No 7

Studies problem of calculating reactive part of
radiation resistance of a line conductor (antenna
radiation resistance being given. Establishes
current distribution being given. Establishes
that value of reactance is finite only for the
case of a tuned dipole. Gives formulas for re-
51/49T103

Jul 49

USSR/radio

(Contd)

Jul 49

Reactance of a half-wave dipole in a cylindrical
wave guide of arbitrary form. Submitted
24 Jul 48.

51/49T103

TIKHONOV, A. N.

USSR/Physics
Absorption

Feb 49

"Absorption of Gas From an Air Current by a Layer of Granular Material III," Ya. L. Zabeshinskiy, A. A. Zhukhovitskiy, A. N. Tikhonov, 10 pp

"Zhur Fiz Khim" Vol XXXIII, No 2

Conducted experiments with activated carbon using diethyl ether as a sorbate to verify theoretical results of previous reports on certain dependencies of concentration C at a distance L upon the time theta for various types of isotherms. Submitted 26 Feb 47.

PA 47/49T102

"APPROVED FOR RELEASE: 07/16/2001

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TIRMANOV A N

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TIKHONOV, A. N.

158T53

USSR/Geophysics - Heat Conductivity May/Jun 50
Geophysical Prospecting

"Third Boundary Problem for an Equation of the Parabolic Type," A. N. Tikhonov, Geophys Inst, Acad Sci USSR, 6 pp

"Iz Ak Nauk SSSR, Ser Geograf i Geofiz" Vol XIV, No 3

Solves heat conductivity equation for short segment with third-order boundary conditions on both ends in form of series of integrals, i.e., form convenient for calculating small time intervals. Process governing establishment of electric field in nonhomogeneous medium can be studied by presentation of problem in this form. Submitted 12 Jan 50.

[REDACTED] 158T53

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755610019-6

FIKHTENGLER, A.

Sources: Mathematical Reviews, Vol. 19, No. 1

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755610019-6"

TIKHONOV, A. N.

PA 163T20

USSR/Mathematics - Differential Equations
Small Parameters

Jul/Aug 50

"Systems of Differential Equations Containing
Parameters," A. N. Tikhonov, Moscow

"Matemat Sbor" Vol XXVII (69), No 1, pp 147-156

Considers $dy_i/dt = f_i(t, x, z)$ ($i = 1, 2, \dots, n$)

$M_j dz_j/dt = F_j(t, y, z)$ ($j = 1, 2, \dots, m$)
and its solutions as it depends on the small
parameter M_j (greater than zero). Submitted
3 Jan 49.

163T20

TIKHONOV, A. N.

PA 175T22

USSR/Geophysics - Earth Currents
Prospecting

11 Jul 50

"Determining the Electrical Characteristics of the Deep Layers of the Earth's Crust," A. N. Tikhonov, Corr Mem, Acad Sci USSR, Geophys Inst, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol LXXIII, No 2, pp 295-298

Theoretical discussion of relations between magnetic variations and earth currents from standpoint of Maxwell's eq. Problem of using natural elec fld for study of elec properties of deep layers of the earth's crust (elec prospecting at great depths). Submitted 20 May 50.

175T22

Translators DRB-T 175R. 23 Jun 55

TIKHONOV, A.N.

1/2

Mathematical Reviews
May 1954
Analysis

*Tikhonov, A. N., i Samarskii, A. A. Uravneniya matematicheskogo fiziki. [The equations of mathematical physics.] Gosudarstv. Izdat. Tehn.-Teor. Lit., Moscow-Leningrad, 1951. 659 pp. 14.80 rubles.

This book consists of three parts: (i) the theory of the equations of mathematical physics; (ii) applications to physical problems; and (iii) special functions. The first part comprises the body of the text. Each of the chapters (except the first) has an appendix which discusses applications to physical problems of the material just presented. The theory of special functions is taken up separately in a special lengthy (about 100 pages) appendix.

The first chapter gives a brief discussion of the classification of second order partial differential equations. Chapters 2, 3, and 4 treat the simplest problems for equations of hyperbolic, parabolic, and elliptic type. The appendices to these chapters take up such topics as the vibrating string and rod, radioactive decomposition, electrostatics, and hydrodynamics.

Chapter 5 is a continuation of chapter 2 and discusses wave propagation in space. The sixth chapter treats heat

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11 NOV, H. IV

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diffusion in space while chapter 7 continues the discussion of chapter 4 on elliptic equations. Some of the topics considered in the appendices to these chapters are: elasticity, electromagnetic waves, radio waves on the earth's surface and hollow resonators. Each of the chapters has a set of exercises at the end. The section on special functions develops the theory of Bessel functions, Legendre, Hermite and Laguerre polynomials. A few applications are given.

This book has a wealth of applications, many to topics not usually treated. For example, two applications which the reviewer has not seen elsewhere concern the diffusion of clouds and the influence of radioactivity on the temperature of the earth's core. M. H. Proctor (Berkeley, Calif.).

11/8/54 LM

TIKHONOV, A. N.

USSR/Geophysics - Electrical Field Nov/Dec 51
in Layers

"Growth of an Electrical Current in a Nonhomogeneous Laminar Medium," A. N. Tikhonov, O. A. Shugarevskaya, Geophys Inst, Acad Sci USSR

"IZ Ak Nauk SSSR, Ser Geofiz" No 6, pp 50-55

Gives results of computations relating to the problem concerning the growth of an electromagnetic field in a stratified nonhomogeneous space (in z-plane) which is excited upon the closing of the supply circuit lying on the surface $z=0$. Considers a conducting layer of

19975

USSR/Geophysics - Electrical Field Nov/Dec 51
in Layers (Contd)

thickness L (cond s), lying on a nonconducting foundation; also considers the case for a conducting foundation. In both cases 2 schemes of the disposition of the receiving and feeding electrodes are considered: parallel and axial. Submitted 13 Jun 51.

19975